

## VARIABLE SPEED DRIVE FOR MULTIPLE LOADS

### ABSTRACT OF THE DISCLOSURE

A variable speed drive is provided having a converter to convert an AC voltage to a DC voltage, a DC link to filter and store energy from the converter, and a plurality of inverters, wherein each inverter is configured to convert a DC voltage to an AC voltage to power a corresponding load connected to the inverter. The converter is electrically connected to an AC power source, the DC link is electrically connected to the converter, and the plurality of inverters are electrically connected in parallel to the DC link. Each inverter of the plurality of inverters is configured to operate substantially independently of other inverters of the plurality of inverters.